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E.O. Hulburt Center for Space Res., Naval Res. Lab., Washington, DC, USA;

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Abstract:

CREME96 is an update of the Cosmic Ray on Micro-Electronics code, a widely-used suite of programs for creating numerical models of the ionizing-radiation environment in near-Earth orbits and for evaluating radiation effects in spacecraft. **CREME96**, which is now available over the World-Wide Web (WWW) at <http://crsp3.nrl.navy.mil/creme96/>, has many significant features, including: (1) improved models of the galactic cosmic ray, anomalous cosmic ray, and solar energetic particle ("flare") components of the near-Earth environment; (2) improved geomagnetic transmission calculations; (3) improved nuclear transport routines; (4) improved single-event upset (SEU) calculation techniques, for both proton-induced and direct-ionization-induced SEUs; and (5) an easy-to-use graphical interface, with extensive on-line tutorial information. In this paper we document some of these improvements

Index Terms:

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